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DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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0014

March 5, 1992

TO: Daron Haddock, Permit Supervisor

FROM: Wayne H. Western, Reclamation Engineer *WHW*

RE: Overland Conveyor Revision, Utah Fuel Company, Skyline Mine
ACT/007/005, Folder #2, Carbon County, Utah

SUMMARY

Utah Fuel Company has requested that their mine and reclamation plan be modified to include the construction, operation and reclamation of the Eccles Canyon conveyor belt from the Skyline mine to their railroad loadout area. Utah Fuel wants to install the conveyor to reduce transportation costs and increase safety, by reducing the truck traffic on State highway SR-264.

The conveyor corridor will usually be within 100 feet of the right-of-way for SR-264. From the mine to the canyon mouth the conveyer will usually be on the north side (uphill) from the road. Approximately 750 feet from the loadout facility the belt will cross the highway and will be located on the south side (downhill) from the road.

A bench for the conveyor has been constructed from the Skyline Mine to Whiskey Creek. From Whiskey Creek to the loadout facility Utah Fuel proposes to construct the towers and reclaim the sites using mobile cranes that will be stationed along the highway thus eliminating the need to extend the conveyor bench down the canyon.

Eccles Canyon has steep slopes except at the canyon's mouth. In many places the slopes steepness is at the angle of repose. Any activity on the steep slopes could cause failure. Utah Fuel needs to address the slope stability issues and how they will affect the public.

TECHNICAL ANALYSIS

Deficiency:

R645-103-234: Where the coal mining and reclamation operation is proposed to be conducted within 100 feet, measured horizontally, of the outside right-of-way line of any public road (except as provided in 40-10-24(4)(c), or where the Applicant proposes to relocate or close any public road, the Division or public road authority designated by the Division will:

R645-103-234.100: Require the Applicant to obtain necessary approvals from the authority with the jurisdiction over the public road.

The Applicant is required to obtain approval from all authorities with jurisdiction over SR-264 prior to construction activity within 100 feet of the highway. Those agencies may also need to grant permission prior to constructing the belt over SR-264.

The Applicant has not shown that any agency with authority over SR-264 has granted permission to Utah Fuel to construct the conveyor belt within 100 feet of the road's right of way or to cross the highway.

RECOMMENDATION

Utah Fuel needs to provide documentation showing that the Utah Department of Transportation, Carbon County, and any other agency with jurisdiction over SR-264 has granted permission for the conveyor.

Deficiency:

R645-103-234: Where the coal mining and reclamation operation is proposed to be conducted within 100 feet, measured horizontally, of the outside right-of-way line of any public road (except as provided in 40-10-24(4)(c), or where the Applicant proposes to relocate or close any public road, the Division or public road authority designated by the Division will:

- R645-301-542.200:** A plan for backfilling, soil stabilization, compacting and grading, with contour maps or cross-sections that show the anticipated final surface configuration of the proposed permit area;
- R645-301-542.300:** For the purpose of UNDERGROUND COAL MINING AND RECLAMATION ACTIVITIES, final surface configuration maps with cross-sections (at intervals specified by the Division) that indicate;
- R645-301-542.310:** The anticipated final surface configuration to be achieved for the affected areas. The maps and cross-sections will be prepared and certified as described under R645-301-512;
- R645-301-542.320:** Location of each facility that will remain on the proposed permit area as a permanent feature, after the completion of coal mining and reclamation operations;
- R645-301-542.400:** Before abandoning a permit area or seeking bond release, a description ensuring all temporary structures are removed and reclaimed.

The Applicant has not provided the Division a detailed reclamation plan for the removal of the conveyor belt and associated structures.

RECOMMENDATION

Utah Fuel needs to provide the Division with a reclamation plan for the Eccles Canyon conveyor belt. The reclamation plan will have contour maps, cross-sections, and text describing how the bent tower will be removed, what if any structures will be left in place, and how the slopes will be stabilized.

Deficiency:

- R645-301-553.130:** Achieve a post mining slope that does not exceed either the angle of repose or such lesser slope as is necessary to achieve a minimum long term static safety factor of 1.3 and prevent slides.

Utah Fuel has not provided any information that demonstrates that the backfilling and grading associated with the bent towers will result in a static safety factor of 1.3 and prevent slides. Many of the bent towers are proposed to be located on slope whose steepness is at or near the angle of repose. Since slopes whose steepness is at the angle of repose have a safety factor of 7, the Division needs proof that construction and reclamation activities will not create a hazard.

RECOMMENDATION

Utah Fuel needs to provide information on the construction and reclamation of the bent tower sites to show that those activities will not create a hazard.

Deficiency:

- R645-301-521:** General. The Applicant will include a plan, with maps, cross-sections, narrative, descriptions, and calculations indicating how the relevant requirements are met. The permit application will describe and identify the lands subject to coal mining and reclamation operations over the estimated life of the operations and the size, sequence, and timing of the subareas for which it is anticipated that individual permits for mining will be sought;
- R645-301-521.100:** Cross-sections and Maps. The application will include cross-sections, maps and plans showing all the relevant information required by the Division, to include, but not be limited to;
- R645-301-521.133:** The measures to be used to ensure that the interests of the public and landowners affected are protected if, under R645-103-234, the Applicant seeks to have the Division approve;
- R645-301-521.133.1:** Conducting the proposed coal mining and reclamation operations within 100 feet of the right-of-way line of any public road, except where mine access or haul roads join the right-of-way; or

The conveyor corridor has some critical areas, such as drainages, that if disturbed would be detrimental to the public and adjacent landowners. Utah Fuel needs to identify those areas and protect them.

Utah Fuel's operational plan calls for mobile cranes to be located on the pavement. If the cranes need to be located off the pavement Utah Fuel must first get approval from the Division to locate any heavy equipment off the pavement.

Utah Fuel needs to protect the public and affected landowners in case the belt ruptures or there is a structural failure. The company needs to develop a mitigation plan and have it approved by the Division.

RECOMMENDATIONS

Utah Fuel needs to identify the critical areas along the conveyor corridor and stipulate that those areas will not be disturbed. The company also needs to stipulate that the cranes and other heavy equipment will be located on the pavement. If the cranes or other heavy equipment need to be located off the pavement then Utah Fuel must first obtain permission from the Division.

Utah Fuel will submit a plan and have it approved by the Division to handle any structural failure of the conveyor system or coal spillage

Deficiency:

R645-301-553.100: Achieve the approximate original contour, except as provided in R645-301-553.600 through R645-301-553.642.

Utah Fuel's reclamation plan needs to include details, maps and cross-section on how the area, where the conveyor bench is located, will be restored to areas approximate original contour. If Utah Fuel wants a variance from approximate original contour restoration requirements then the company must request the variance and comply with the requirements of R645-302-271.

RECOMMENDATION

Utah Fuel needs to either receive a variance from the approximate original contour requirements associated with the conveyor bench and modify their reclamation plan, or the reclamation plan must be modified to include restoring the area to its pre-mine state.

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Deficiency:

R645-301-830: Determination of bond amount. Utah Fuel's bond estimates do not include the cost of grading the conveyor bench or backfilling the holes where the conveyor towers were located. Estimates given by Utah Fuel for the reclamation of the bent towers below Whiskey Creek do not reflect the additional cost of using cranes.

RECOMMENDATION

Utah Fuel should update their bond estimates to include the additional reclamation costs associated with the conveyor belt.

CONCLUSIONS

Utah Fuel's request to modify their mine and reclamation plan to install a conveyor belt from the mine to the loadout facility will be in the public's interest because of the reduced truck-traffic. The plan has some technical deficiencies that need to be addressed, but once they are the changes should be approved.

SKYLINE